

DETAILED ACTION

- a. This action is taken in response to amendments and remarks filed on 7/6/2009 and request for continued examination (RCE) filed on 7/23/2009.
- b. Claims 1-13, 15, 17-38, 40, 42, 44, and 46 (renumbered as 1-40) are allowed.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 6, 2009 has been entered.

Information Disclosure Statement

The Information Disclosure Statement(s) received on October 7, 2009 is in compliance with provisions of 37 CFR 1.97. Accordingly, the Information Disclosure Statement(s) are being considered by the examiner.

Terminal Disclaimer

The terminal disclaimer filed on 10/7/2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of co-pending applications 10/526,747 and 10/526,748 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone conversation with Applicant's attorney Peter C. Yi (Reg. No. 61,790) on October 6, 2009.

Please enter the amendment filed on 7/6/2009 and further amend as follows:

1. (Currently Amended) A method for moving data objects in a computer system from a first storage location to a second storage location, the method comprising:
 - selecting a data object from the first storage location;
 - determining whether an identifier (ID) of the data object is stored in a transactional lock object, the ID comprising one or more key fields of the data object;
 - when the ID is not stored in the transactional lock object, storing the ID in the transactional lock object, indicating that an action is being performed on the data object;
 - determining whether the ID is stored in a permanent lock object;
 - when the ID is not stored in the permanent lock object, storing the ID in the permanent lock object, indicating that the data object is subject to a moving process;
 - deleting the ID from the transactional lock object after storing the ID in the permanent lock object;

storing a copy of the data object at the second storage location;
determining whether the copy of the data object is successfully stored at the second storage location; and
when the copy of the data object is successfully stored at the second storage location:
assigning the copy of the data object stored at the second storage location to the ID in the permanent lock object;
deleting the data object from the first storage location; and
deleting the ID from the permanent lock object after deleting the data object from the first storage location.

2. (Currently Amended) The method of claim 1, wherein the data object comprises one or more fields of one or more tables, ~~and wherein the ID comprises one or more key fields of the one or more tables.~~

3. (Previously Presented) The method of claim 1, wherein the data object is stored in a file and wherein an assignment of the ID to the file or to a name of the file is stored in the permanent lock object.

4. (Previously Presented) The method of claim 1, wherein the permanent lock object is stored on a nonvolatile storage means.

5. (Previously Presented) The method of claim 1, wherein the ID is stored in the transactional lock object after selecting the data object from the first storage location.

6. (Currently Amended) The method of claim 1, wherein the ID is stored in the transactional lock object before storing the copy of the data object at the second storage location.

7. (Currently Amended) The method of claim 1, wherein storing the ID in the permanent lock object further comprises:

storing IDs of other data objects in the permanent lock object before storing the copy of the data object at the second storage location.

8. (Currently Amended) The method of claim 1, further comprising:
when the ID is stored in the permanent lock object, skipping storing the copy of the data object at the second storage location.

9. (Currently Amended) The method of claim 1, further comprising:
determining whether another copy of the data object is stored in the second storage location; and

when another copy of the data object is stored in the second storage location, skipping storing the copy of the data object at the second storage location.

10. (Currently Amended) The method of claim 9, wherein determining whether another copy of the data object is stored in the second storage location comprises determining whether the ID is stored in the permanent lock object.

11. (Currently Amended) The method of claim 1, further comprising:
~~determining whether storing the data object in the second storage location was successful; and~~

when storing the copy of the data object in the second storage location was not successful, skipping deleting the data object from the first storage location and skipping deleting the ID from the permanent lock object.

12. (Previously Presented) The method of claim 1 for use in an enterprise resource planning software.

13. (Currently Amended) A computer system for processing data, the computer system comprising:

memory means for storing program instructions;

input means for entering the data;

storage means for storing the data;

a processor responsive to the program instructions, wherein the program instructions comprise program code means for performing a method for moving data objects in the

computer system from a first storage location to a second storage location, the method comprising:

selecting a data object from the first storage location;

determining whether an identifier (ID) of the data object is stored in a transactional lock object, the ID comprising one or more key fields of the data object;

when the ID is not stored in the transactional lock object, storing the ID in the transactional lock object, indicating that an action is being performed on the data object;

determining whether the ID is stored in a permanent lock object;

when the ID is not stored in the permanent lock object, storing the ID in the permanent lock object, indicating that the data object is subject to a moving process;

deleting the ID from the transactional lock object after storing the ID in the permanent lock object;

storing a copy of the data object at the second storage location;

determining whether the copy of the data object is successfully stored at the second storage location; and

when the copy of the data object is successfully stored at the second storage location;

assigning the copy of the data object stored at the second storage location to the ID in the permanent lock object;

deleting the data object from the first storage location; and

deleting the ID from the permanent lock object after deleting the data object from the first storage location.

14. (Canceled).

15. (Currently Amended) A computer readable storage medium comprising instructions for performing a method for moving data objects in a computer system from a first storage location to a second storage location, the method comprising:

selecting a data object from the first storage location;

determining whether an identifier (ID) of the data object is stored in a transactional lock object, the ID comprising one or more key fields of the data object;

when the ID is not stored in the transactional lock object, storing the ID in the transactional lock object, indicating that an action is being performed on the data object;

determining whether the ID is stored in a permanent lock object;

when the ID is not stored in the permanent lock object, storing the ID in the permanent lock object, indicating that the data object is subject to a moving process;

deleting the ID from the transactional lock object after storing the ID in the permanent lock object;

storing a copy of the data object at the second storage location;

determining whether the copy of the data object is successfully stored at the second storage location; and

when the copy of the data object is successfully stored at the second storage location:

assigning the copy of the data object stored at the second storage location to the ID in the permanent lock object;

deleting the data object from the first storage location; and

deleting the ID from the permanent lock object after deleting the data object from the first storage location.

16. (Canceled).

17. (Currently Amended) The computer readable storage medium of claim 15, wherein the data object comprises one or more fields of one or more tables, ~~and wherein the ID comprises one or more key fields of the one or more tables.~~

18. (Previously Presented) The computer readable storage medium of claim 15, wherein the data object is stored in a file and wherein an assignment of the ID to the file or to a name of the file is stored in the permanent lock object.

19. (Previously Presented) The computer readable storage medium of claim 15, wherein the permanent lock object is stored on a nonvolatile storage means.

20. (Previously Presented) The computer readable storage medium of claim 15, wherein the ID is stored in the transactional lock object after selecting the data object from the first storage location.

21. (Currently Amended) The computer readable storage medium of claim 15, wherein the ID is stored in the transactional lock object before storing the copy of the data object at the second storage location.

22. (Currently Amended) The computer readable storage medium of claim 15, wherein storing the ID in the permanent lock object further comprises:
storing IDs of other data objects in the permanent lock object before storing the copy of the data object at the second storage location.

23. (Currently Amended) The computer readable storage medium of claim 15, wherein the method further comprises:
when the ID is stored in the permanent lock object, skipping storing the copy of the data object at the second storage location.

24. (Currently Amended) The computer readable storage medium of claim 15, wherein the method further comprises:
determining whether another copy of the data object is stored in the second storage location; and
when another copy of the data object is stored in the second storage location, skipping storing the copy of the data object at the second storage location.

25. (Currently Amended) The computer readable storage medium of claim 24, wherein determining whether another copy of the data object is stored in the second storage location comprises determining whether the ID is stored in the permanent lock object.

26. (Currently Amended) The computer readable storage medium of claim 15, wherein the method further comprises:

~~determining whether storing the data object in the second storage location was successful; and~~

when storing the copy of the data object in the second storage location was not successful, skipping deleting the data object from the first storage location and skipping deleting the ID from the permanent lock object.

27. (Previously Presented) The computer readable storage medium of claim 15, wherein the computer readable medium is provided as part of a computer program product.

28. (Currently Amended) A computerized system for moving data objects from a first storage location to a second storage location, the computerized system comprising:

a processor executing program instructions;

means for selecting a data object from the first storage location;

means for determining whether an identifier (ID) of the data object is stored in a transactional lock object, the ID comprising one or more key fields of the data object;

means for storing the ID in the transactional lock object, indicating that an action is being performed on the data object, when the ID is not stored in the transactional lock object;

means for determining whether the ID is stored in a permanent lock object;

means for storing the ID in the permanent lock object, indicating that the data object is subject to a moving process, when the ID is not stored in the permanent lock object;

means for deleting the ID from the transactional lock object after storing the ID in the permanent lock object;

means for storing a copy of the data object at the second storage location;

means for determining whether the copy of the data object is successfully stored at the second storage location; and

means for, when the copy of the data object is successfully stored at the second storage location:

assigning the copy of the data object stored at the second storage location to the ID in the permanent lock object;

~~means for~~ deleting the data object from the first storage location; and

~~means for~~ deleting the ID from the permanent lock object after deleting the data object from the first storage location.

29. (Currently Amended) The computer system of claim 28, wherein the data object comprises one or more fields of one or more tables, ~~and wherein the ID comprises one or more key fields of the one or more tables.~~

30. (Previously Presented) The computer system of claim 28, wherein the data object is stored in a file and wherein an assignment of the ID to the file or to a name of the file is stored in the permanent lock object.

31. (Previously Presented) The computer system of claim 28, wherein the permanent lock object is stored on a nonvolatile storage means.

32. (Previously Presented) The computer system of claim 28, wherein the ID is stored in the transactional lock object after selecting the data object from the first storage location.

33. (Currently Amended) The computer system of claim 28, wherein the ID is stored in the transactional lock object before storing the copy of the data object at the second storage location.

34. (Currently Amended) The computer system of claim 28, wherein the means for storing the ID in the permanent lock object further comprises:

means for storing IDs of other data objects in the permanent lock object before storing the copy of the data object at the second storage location.

35. (Currently Amended) The computer system of claim 28, further comprising:

means for skipping storing the copy of the data object at the second storage location when the ID is stored in the permanent lock object.

36. (Currently Amended) The computer system of claim 28, further comprising:
means for determining whether another copy of the data object is stored in the second storage location; and

means for skipping storing the copy of the data object at the second storage location when another copy of the data object is stored in the second storage location.

37. (Currently Amended) The computer system of claim 36, wherein the means for determining whether another copy of the data object is stored in the second storage location comprises means for determining whether the ID is stored in the permanent lock object.

38. (Currently Amended) The computer system of claim 28, further comprising:
~~means for determining whether storing the data object in the second storage location was successful; and~~

means for skipping deleting the data object from the first storage location and skipping deleting the ID from the permanent lock object when storing the copy of the data object in the second storage location was not successful.

39. (Canceled).

40. (Currently Amended) The method of claim 1, wherein deleting the ID from the transactional lock object indicates that the action is not being performed on the data object.

41. (Canceled).

42. (Currently Amended) The computer system of claim 13, wherein deleting the ID from the transactional lock object indicates that the action is not being performed on the data object.

43. (Canceled).

44. (Currently Amended) The computer readable storage medium of claim 15, wherein deleting the ID from the transactional lock object indicates that the action is not being performed on the data object.

45. (Canceled).

46. (Currently Amended) The computerized system of claim 28, wherein deleting the ID from the transactional lock object indicates that the action is not being performed on the data object.

Reason for Allowance

The following is an Examiner's statement of reasons for allowance:

In view of Applicant's amendment submitted on 7/6/2009 and terminal disclaimer filed on 10/7/2009, overcomes the objections/rejections. Furthermore, the prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claims 1, 13, 15, and 28. More specifically, the prior art of records does not specifically suggest wherein as argued and further amended by Applicant, among other limitations, the limitation of "transactional lock object, indicating that an action is being performed on the data object,... permanent lock object, indicating that the data object is subject to a moving process", "when the copy of the data object is successfully stored at the second storage location, assigning the copy of the data object stored at the second storage location to the ID in the permanent lock object".

However, none of the prior art of the record teaches or suggests, independently or in combination, the combination of claimed elements including the specific features recited by the independent claims as indicated above. After a further search and a thorough examination of the present application and in light of the prior art made of record, independent claims 1, 13, 15, and 28 are allowed.

The dependent claims, being definite, further limiting, and fully enabled by the specification and are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEW-FEN LIN whose telephone number is (571)272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shew-Fen Lin /S. L./
Examiner, Art Unit 2166
October 8, 2009

/Hosain T Alam/

Supervisory Patent Examiner, Art Unit 2166